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WORKMAN NYDEGGER
60 EAST SOUTH TEMPLE
1000 EAGLE GATE TOWER
SALT LAKE CITY, UT 84111

EXAMINER	
MASKULINSKI, MICHAEL C	
ART UNIT	**PAPER NUMBER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/661,200	KLOTZ ET AL.	
	Examiner	Art Unit	
	Michael Maskulinski	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15 and 17-21* is/are rejected.

7)☒ Claim(s) *16 and 22* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/9/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Final Office Action

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-15 and 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al., U.S. Patent 5,850,388.

Referring to claim 1:

a. In column 8, lines 43-52, Anderson et al. disclose a protocol analyzer instrument (positioning an analyzer in communication with the network).

b. In column 9, lines 16-21, Anderson et al. disclose that data-bearing frames are transmitted over the network and are received and analyzed by Embedded Code executed by a Protocol Analyzer Instrument using one or more RISC processors and hard-wired analyzer circuits within the Protocol Analyzer Instrument (capturing a data trace of the network with the analyzer).

c. In column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer instrument. Further, in column 11, lines 5-17, Anderson et al. disclose determining station-level statistics by analyzing source and destination addresses in the packet (determining a network device topology from a first processing of the data trace).

d. In Figure 1, Anderson et al. disclose network protocol layers and in column 4, lines 62-63, Anderson et al. disclose identifying the protocol portions of said packets in real time (building user layer protocols). In column 10, lines60-65 continued in column 11, lines 1-17, Anderson et al. disclose computing statistics (protocol analyzing) for each station (a determined device topology) using the source and destination addresses (using a second processing of the data trace and the determined device topology).

e. In column 12, lines 7-15, Anderson et al. disclose updating the error_statistics subarray of the entry in the station list array corresponding to the source address. The error statistics array variable is actually a subarray whose length depends upon the number of types of errors detected for the particular network topology. It contains the error_id and the number_of errors for each type of error detected for the corresponding station (determining errors in the network device topology using protocol experts applied to the user layer protocols in conjunction with the determined device topology).

f. In column 23, lines 58-67, Anderson et al. disclose displaying at least one of the device topology and the determined errors to a user.

Referring to claim 2, in column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer instrument (wherein capturing the trace data comprises capturing and storing trace data

for a first channel and a second channel of the analyzer, the data for the first and second channels being stored independently).

Referring to claims 3 and 18, in column 16, lines 59-63, Anderson et al. disclose that the distribution and percentage distribution of the various protocols present in data frames are hereinafter referred to as "protocol distribution". The calculation of protocol distribution is performed by the embedded code executed by the protocol analyzer instrument (wherein building the user layer protocols comprises: a) stripping a specific protocol layer from a data sample; b) sending the specific protocol layer from the data sample to a software expert configured to analyze the specific protocol layer; and c) repeating steps (a) and (b) until each protocol layer of the data sample, has been processed by a designated software expert).

Referring to claim 4, in column 1, lines 34-47, Anderson et al. disclose different network topologies that are monitored (wherein determining the network device topology comprises analyzing channelized captured trace data to extrapolate information indicative of loops, switches, and switched loops).

Referring to claim 5, in column 10, lines 60-65, Anderson et al. teach wherein determining errors further comprises determining warnings.

Referring to claim 6, in column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer instrument (wherein determining errors further comprises determining at least one

performance metric related to the determined topology and the specific user layer protocol).

Referring to claims 7 and 20, in column 23, lines 7-9, Anderson et al. disclose that the user can select how often network information is updated, i.e. how often the UI requests updates from the embedded code on these parameters (wherein displaying at least one of the device topology and the determined errors to a user comprises displaying a graphical user interface (GUI) to the user, wherein the GUI is configured to receive input from the user to adjust a processing window in the data trace).

Referring to claim 8, in Figure 21, Anderson et al. teach displaying the determined network device topology.

Referring to claim 9, in Figures 18-21, Anderson et al. disclose displaying at least one of an error log, a metrics graph view, and a report view.

Referring to claim 10:

a. In column 7, lines 60-65, Anderson et al. disclose that the present invention may comprise a plurality of protocol analyzer instruments, each having a RISC processor and each monitoring a different segment of a network or monitoring the same network or segment but at a different port or station on the network (collecting a plurality of data traces from the data network with a plurality of network analyzers).

b. In column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer

instrument. Further, in column 11, lines 5-17, Anderson et al. disclose determining station-level statistics by analyzing source and destination addresses in the packet (determining a topology of the data network via analysis of a combination of the plurality of data traces).

c. In Figure 1, Anderson et al. disclose network protocol layers and in column 4, lines 62-63, Anderson et al. disclose identifying the protocol portions of said packets in real time (building user layer protocols). In column 10, lines60-65 continued in column 11, lines 1-17, Anderson et al. disclose computing statistics (protocol analyzing) for each station (a determined device topology) using the source and destination addresses (processing the combination of the plurality of data traces in conjunction with the determined topology to rebuild user layer protocols).

d. In column 12, lines 7-15, Anderson et al. disclose updating the error_statistics subarray of the entry in the station list array corresponding to the source address. The error_statistics array variable is actually a subarray whose length depends upon the number of types of errors detected for the particular network topology. It contains the error_id and the number of errors for each type of error detected for the corresponding station (processing individual protocols to determine errors, warnings, and metrics for the particular protocol).

e. In Figures 18-21, Anderson et al. disclose displaying the errors, warnings, and metrics to the user via a graphical interface.

Referring to claim 11, in column 7, lines 60-65, Anderson et al. disclose that the present invention may comprise a plurality of protocol analyzer instruments, each having a RISC processor and each monitoring a different segment of a network or monitoring the same network or segment but at a different port or station on the network (wherein collecting data traces further comprises selectively positioning the plurality of analyzers to capture data traveling between targets and initiators).

Referring to claim 12, in column 12, lines 7-15, Anderson et al. disclose updating the error_statistics subarray of the entry in the station list array corresponding to the source address. The error_statistics array variable is actually a subarray whose length depends upon the number of types of errors detected for the particular network topology. It contains the error_id and the number of errors for each type of error detected for the Corresponding station (wherein determining topology comprises stepping through channelized data stored from the plurality of data traces to extrapolate information therefrom that indicates the presence of specific network devices).

Referring to claim 13, in column 5, lines 35-44, Anderson et al. teach wherein processing to rebuild user layer protocols comprises stripping each protocol layer from a data sample, analyzing the stripped protocol layer with an expert configured to analyze the stripped protocol layer, and sending the remaining portions of the data sample to additional protocol experts for analysis and forwarding of the data sample until each layer of the data sample has been analyzed by an appropriate protocol layer expert.

Referring to claims 14 and 19, in column 5, lines 9-13, Anderson et al. disclose monitoring in real time one or more selected and assorted network parameters and

comparing the results of said analysis with arbitrary threshold values for said parameters to determine if the transmission on the network is exceeding said threshold so as to constitute an event (wherein processing individual protocols to determine errors for the particular protocol further comprises comparing protocol specific commands to protocol standards to determine if an error has occurred).

Referring to claim 15, in Figures 18-21, Anderson et al. disclose displaying at least one of a graphical metric view, a topology view, and an error log view to a user.

Referring to claim 17:

a. In column 9, lines 16-21, Anderson et al. disclose that data-bearing frames are transmitted over the network and are received and analyzed by Embedded Code executed by a Protocol Analyzer Instrument using one or more RISC processors and hard-wired analyzer circuits within the Protocol Analyzer Instrument (capturing at least one bidirectional data trace from the network).

b. In column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer instrument. Further, in column 11, lines 5-17, Anderson et al. disclose determining station-level statistics by analyzing source and destination addresses in the packet (determining a topology of the data network via analysis of a combination of the plurality of data traces).

c. In Figure 1, Anderson et al. disclose network protocol layers and in column 4, lines 62-63, Anderson et al. disclose identifying the protocol portions of

said packets in real time (building user layer protocols). In column 10, lines60-65 continued in column 11, lines 1-17, Anderson et al. disclose computing statistics (protocol analyzing) for each station (a determined device topology) using the source and destination addresses (analyzing the bidirectional data trace to extrapolate information indicative of network topology and analyzing individual data samples from the data trace using the network topology to rebuild user layer protocols for the individual data sample).

d. In column 12, lines 7-15, Anderson et al. disclose updating the error statistics subarray of the entry in the station list array corresponding to the source address. The error_statistics array variable is actually a subarray whose length depends upon the number of types of errors detected for the particular network topology. It contains the error id and the number_of errors for each type of error detected for the corresponding station (determining errors in the network using the network topology, the user layer protocols, and standards for the particular user layer protocols).

Referring to claim 21, in Figures 18 and 19 A-C, Anderson et al. disclose calculating and displaying network performance metrics to the user.

Allowable Subject Matter

3. Claims 16 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed October 9, 2007 have been fully considered but they are not persuasive.

5. On page 8, under section **a. claims 1-9**, the Applicant argues, "Hence, according to the Examiner, the 'statistics' of Anderson correspond to the claimed 'device topology'." However, the Examiner then alleged that these same statistics are computed 'using...the determined device topology [i.e., the statistics].'" The Examiner disagrees. In column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer instrument. This clearly is a device topology because each station is identified. Further, in column 11, lines 5-17, Anderson et al. disclose determining station-level statistics by analyzing **source and destination addresses** in the packet. By using the addresses, the respective stations are identified and the statistics are correlated to each respective station.

6. On page 8, under section **a. claims 1-9**, the Applicant argues, "However, the Examiner did no even assert that the 'user layer protocols' are built 'using a second processing of the data trace and the determined device topology,' as recited in claim 1. The cited section shows a creation of a station list through analyzing source and destination addresses (determining a device topology based on a first processing) and then for each station there is associated statistics. Throughout the patent, Anderson et al. discloses protocol analyzing. Figure 1 shows protocol layers and in column 4, lines

62-63, Anderson et al. disclose identifying the protocol portions of the packets. Anderson et al. disclose building user layer protocols by analyzing the packets and then associating statistics with each station based on analysis of the addresses (the determined device topology).

7. On page 9, under section **b. claims 10-16**, the Applicant argues, "The Examiner has again based the rejection on illogical reasoning. In particular, the Examiner alleged a correspondence between determining 'statistics' and 'determining a topology,' while also alleging that the statistics are computed by 'processing...data traces in conjunction with the determined topology [i.e., the statistics].'" "The statistics cannot logically be computed by processing data in conjunction with the statistics themselves." The Examiner disagrees with the Applicant's assertion. In column 10, lines 41-65, Anderson et al. disclose creating a "station list array." A station array list is a network device topology since it shows the devices present in the network. In column 11, lines 5-17, Anderson et al. disclose using destination and source addresses to associate statistics with the stations. In other words, by analyzing the data it is determined what stations there are and there corresponding address and statistics. Thus, it is not the statistics themselves but rather creating the list of stations and their statistics that correspond to determining a network device topology from a first processing of the data trace.

8. On page 9, under section **b. claims 10-16**, the Applicant argues, "However, the Examiner did not even assert that 'processing the combination of the plurality of data traces in conjunction with the determined topology' is done 'to rebuild user layer protocols,' as recited in claim 10. Instead, the Examiner asserted that the processing is

done to compute the statistics described in columns 10 and 11 of Anderson. Thus, even if these assertions are accurate, which Applicants do not concede, they are not relevant to what is actually recited in the claim." The Examiner disagrees. The Applicant believes that the assertions are irrelevant because the Applicant fails to understand what statistics are gathered. The statistics are directly related to protocols. By creating protocol-related statistics for each station, Anderson et al. disclose processing the data traces in conjunction with the determined topology. Regarding the limitation of "rebuilding user layer protocols", as pointed out by the Examiner in Figure 1, Anderson et al. show the different protocol layers. Further in Figure 7, Anderson et al. disclose identifying individual protocols in the frames. Each protocol layer is taken one by one from the frame and thus the layers are rebuilt.

9. With respect to the Applicant's arguments on page 10, under the section **c. claims 17-22**, the Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Further, the Examiner disagrees at least for the reasons given above.

Conclusion

This is an RCE of applicant's earlier Application No. 10/661,200. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL**

even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Maskulinski whose telephone number is 571-272-3649. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on 571-272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael Maskulinski

Michael Maskulinski
Primary Examiner
Art Unit 2113